

placed in middle of chamber. Termitarium 5 ft. 6 in. high, 5 ft. in length, 18 in. thick at base, tapering to a fine edge at top; thickness at nest 7 in.

The nesting sites appear to be rather frequently taken possession of by *P. atrophygialis*. Eggs of the Parrot are laid on soft broken up termitarium material, and number from 4 to 6, pure white, almost round, and with little gloss.

Clutch 1, measuring in millimetres:—

A—.83 x .70 B—.83 x .70 C—.81 x .72

Clutch 2 (Type).—A—.83 x .73; B—.84 x .74; C—.84 x .68; D—.82 x .73.

One clutch taken was the produce of birds in immature plumage, which presented such variation from adults that Mr. McLennan at first thought he had a new species. The variation probably accounts for stories circulated as to two species of anthill Parrots being found in the Coen district, but a person of Mr. McLennan's wide experience and ornithological knowledge is not likely to have overlooked a second species during nine months' residence in the locality.

A Collecting Trip to Cape York Peninsula

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INTRODUCTION

Mr. William McLennan, who, on my behalf, had previously conducted several successful expeditions in Northern Australia, in search of ornithological novelties, agreed to make another trip into the centre of Cape York Peninsula. My original intention being that he should work north from Coen, but as things turned out there was so much of interest in the locality (Coen), that the whole period of engagement (nine months) was spent there.

The Queensland Government has always been extremely liberal to me in the matter of permits, and again my thanks are due for its consent to a further collection of specimens for scientific purposes. I am indebted also to Sergeant McGreehan, in charge of the police, and Mr. D. Anderson, State school teacher at Coen, for assistance and kindness to my collector.

McLennan left Cooktown in the small ketch "Elam" on the 27th August, 1921, arriving at Port Stewart, 175 miles distant, on the evening of the 30th. Coen is not easy of access, but may be reached (1) by boat to Port Stewart, thence per vehicle 45 miles; or (2) by rail from Cooktown to Laura, thence on horseback for 170 miles; the last-named is the mail route (per pack horse, Coen to Laura), the trip being made once per fortnight, except during the wet season, when long delays occur.

Coen, situated on the head waters of a river of the same name, and so called (in honour of Governor Coen, of Batavia) by the early Dutch navigator Jan Carstenzoon during his voyage in the ships *Arnhem* and *Pera* in 1623, and is probably one of the first-named rivers in Australia. Some confusion existed as to the identity of the River Coen, and the matter is explained by R. Logan Jack in his "Northmost Australia," page 49. The same writer gives particulars of gold mining operations carried out later in the Coen district (page 467) where one mine, "Great Northern," is stated to have produced £114,000 worth of gold. The Coen of today has fallen away in importance, a few prospectors only representing the gold mining industry; it is practically surrounded by cattle stations owned chiefly by the State, and is a telegraph station on the line to Thursday Island.

The country in the vicinity is of granite formation, hilly, it being practically on the main range; well timbered with various species of Eucalypts, Melaleucas, and Acacias. It is well grassed, the chief kinds being *Heteropogon*, *Andropogon* and *Themida* (Northern Kangaroo grass), two first named producing most objectionable seeds, which penetrate clothing, and make travelling most unpleasant and difficult during the autumn months.

McLennan reached his collecting locality early in September, and remained there for about nine months, securing many rare specimens of birds, eggs, reptiles and insects; amongst which is a giant venomous snake at present not identified, but which is probably a new and highly interesting species. Owing to the very favourable climate, trees in bloom were always in evidence, providing abundant food for honey-eating birds, which, in consequence, appeared to breed all the year round.

DESCRIPTIONS OF COUNTRY, EXCURSIONS AND EXPERIENCES

The nature of the country and some of the experiences of a collecting trip may be gathered by extracts from the diary, which is voluminous and too full of carefully kept details to be used at length here. The diary is punctuated with many droll expressions.

The river flats, valleys and gullies are mostly well timbered, and birds appear to be fairly numerous. The bed of the river is about 100 yards in width, heavily timbered with tall thin paper barks, river wattles and numerous scrub trees, also a bushy tea-tree (*Melaleuca*), a mass of bottle-brush flowers. Two large leaved varieties in November and again in March were in full flower, one beautiful cerise coloured, the other greenish yellow.

The track coming into Coen runs through level heavily timbered forest country, bloodwood, box, Moreton Bay ash, cabbage gum, river gum, wattle, ironwood, beefwood, wild cotton, and many other trees and shrubs. There appears to be a big break in the coastal scrub belt hereabouts. Bird life numerous. We passed through the track of a cyclone, trees and branches down everywhere, and piles of debris. Standing trees now heavily

refoliated after the pruning. Great bird chorus at the first flush of dawn. The short, sharp whistle of *Entomyzon cyanotis* (Blue-faced Honey-eater), locally called "morning bird," is the dominant note. *Cracticus mentalis* (Black-backed Butcher-Bird) comes next, with its beautiful bubbling flute-like song. *Dacelo leachi* (Blue-winged Kookaburra); *Scythrops novaehollandiæ* (Channel-Bill) vie with each other in raucous screams. *Microeca flavigaster* (Lemon-breasted Flycatcher), and *Gerygone albogularis* (White-throated Warbler), both trill sweetly. *Colluricincla brunnea* (Brown Shrike-Thrush) adds other notes of sweetness with its clear and varied calls, so also does *Grallina cyanoleuca* (Magpie-Lark), and *Oriolus sagittatus affinis* (Northern Oriole). The calls of *Geopelia humeralis* (Bar-shouldered Dove), *G. placida* (Peaceful Dove), *Geophaps scripta* (Squatter-Pigeon), and *Chlamydera nuchalis orientalis* (Eastern Bower-Bird) harmonise with the general chorus. *Pomatostomus temporalis* (Grey-crowned Babbler), *Platycercus adscitus amathusiæ* (Northern Blue-cheeked Parrot), *Cacatua roseicapilla* (Galah), *Philemon argenticeps* (Silvery-crowned Friar-Bird), and *P. citreogularis sordidus* (the Little Friar-Bird) are also heard.

While searching for nests he gets covered with small black ants, which give off an "overpowering smell," or he "meets a brown snake coiled at the foot of the tree," or discovers "a hornets' nest—or, rather, the hornets discover me first; had to beat a retreat." "While climbing for a *Strepera* (Crow-Shrike) nest, 50 feet up, I got badly stung about head, hands and back by vicious little yellow hornets, the slightest movement on my part would attract additional hordes of the little brutes. I get some of my own back on those that are anchored to various parts of my anatomy by their stings." "*Gerygone albogularis* often nests near hornets. I got in first blow with this crowd by tying a bunch of dry *Pandanus* leaves to a long stick and burning out the hornets' nest before climbing the tree."

McLennan had the sometimes doubtful assistance of black-boys. His diary records:—Friday, 28/10/21: Bob did not turn up with the horse. 3 p.m.: Go to native camp and learn that Bob has gone fishing. He had taken the bridle, and evidently planted the horse, with the intention of getting him on his return, then telling me it had taken him all day to find it." "On going out to make a camp at Rocky Ranges with four pack horses, had to leave without the nigger. The horses seemed to know that I was helpless. They spread out all over the place, and would not stick to the track. One of them got a bit extra by bumping into a nest of hornets, which livened him up."

"Mosquitoes are bad when there is no breeze, and a small grey March fly comes along for its drop of blood. Mistletoes are now in bloom, vivid splashes of scarlet amongst the varied greens. The box trees are flowering, and two kinds of paper barks. Heat becomes intense. The official record, I believe, at 9 a.m.

(10/12/21) was 102 deg. Blackboy complains that his feet 'close up burn.' There was some poorer country about the Rocky Ranges with Casuarina and Banksia, mostly stunted, big areas of Grass-tree are passed through, and scarcely any bird life seen."

Real tropical scrub (jungle), however, was the objective, and when he finally reached it "there were dense thickets of bamboos and lawyer vines mazed and tangled from the ground upward, forming a barrier through which one has constantly to cut and crawl, in some places completely obscuring a view of the overarching trees."

So much for the dry season. McLennan had a different tale to tell when the rainy season began, with the new year. "Rain nearly every day, and solid showers that would put an inch of water in a pannikin in no time. Streams running like millraces. A trip that could be done in three days comfortably, might now take 30 days on account of the floods and treacherous nature of the country. Horses would sink to the knees and deeper if they left the track. One horse let off steam one day by trying to buck off the pack, but soon got tired of this in the boggy ground."

Prospectors told McLennan: "You can't live in that Rocky scrub now; leeches will suck you dry, and then the beetles will pick your bones." But he persisted, and got something of what he was promised. Leeches sometimes filled the boots with blood from their bites. "Beetles—the air is thick with them; the ground a moving ravening mass, rolling, tumbling inches deep, and devouring every fallen scrap of food. They appear after dark."

"Rain falls in chunks. The ground inside the tent is like a saturated sponge, water flowing down the ridge in all directions. Fortunately there is a big Termites' mound close by, which I hollowed out for a fireplace. Tommy the blackboy got sufficient paperbark to make a rough shelter over it, a dry fireplace is an absolute necessity in these parts."

"Monday, 20/2/22: "The excessive moisture is playing the deuce with everything. Flour and tea have gone mouldy; sugar is melting; salt beef, nearly all putrid, and we haven't been able to get any game to date. Blankets are wet and mouldy, cannot get them dry. It is impossible to do any writing with pen and ink, as the paper is saturated with moisture."

MORE SIDELIGHTS

Taking "Snaps" in Tree-tops.—Bird (Black-backed Butcher) sat on nest till I got within 6 feet. Taking "snaps" was rather a difficult job. I had to stand upright on a swaying limb, one leg lightly braced against a small upright branch, top of camera just under my chin. Was so intent on my work that I nearly took a step sideways, to get better look at the view-finder; just remembered in time that I was 40 feet from the ground.

Another "Snap-shot."—Flush a female Turnix, which flew off behind me. Twist round in saddle and try a shot, but miss. Horse nearly jumped from under me.

Single-handed.—Saddle up and get pack horses loaded (have to make two light packs of my stores, &c.) and start off on my own. The confounded horses seemed to know that I was practically helpless—gun in one hand, collecting rod in other, and *no whip*. The animals spread all over the place, and would not stick to the track; when I went to drive one lot along, others would stop to feed; a couple of times they tried to bolt back along the track. It was a perfect "nightmare" trip.

A Grateful Shade.—The bed of the creek is thickly grown with a variety of trees—large Paper-barks, River Wattles, big Leichhardt "Plums," in full bloom, Wild "Cherries," and numerous other heavily foliated species.

Cause and Effect.—20/12/21: Rainfall 70 points. Night—deafening chorus of frogs.

Wayward Horse.—Would crawl along in front of the pack-horses, prevent them from going ahead. Later he got what was owing to him, and a bit extra, through bumping a nest of inch-long vicious red hornets. These shifted him along at a great pace for a hundred yards or so.

An Evening Plague.—The air is alive with flies, about the size of the house species, which drop a perfect shower of small maggots, as they fly over our food. These, failing to land on a congenial spot, bend themselves into circle, straighten out instantaneously, and then flick about all over the place. Just as well it's a bit dark.

Short Rations.—Everyone in the district has been on short rations for about a fortnight, owing to supply boat not running to time. I had sufficient, but had to share it amongst those who had least.

Snakes!—Saw a beautiful and brilliant green snake with an irregular white stripe down centre of the back and tiny irregular spots of white on sides of body; it was about 5 feet long, and as thick as one's wrist. It was in a tangle of lawyer vines a few feet from the ground, and showed fight.

31/3/22.—When riding through some fairly long grass, I was right over a large snake—a Black-headed Python, I thought, judging by its size. I could not see it plainly so I did not feel anxious, as this snake is sluggish and inoffensive. Passing over it, I saw its head. (Expletive!) "A Brown Snake!" Did not have gun or pistol, so called to Tommy (the black) to cut a strong sapling. As I dismounted the snake started off. I grabbed the sapling—and stopped it. Only about 9 feet long. More anon.

Once Tommy let out an unearthly yell; jammed the spurs into his horse, which made a plunge some feet away. Thought a

brown snake had got Tommy—a snake all right, but of the Carpet species, about 10 feet long. Did not destroy it.

17/4/22.—Saw a brown tree-snake, about 3 feet long, in a mountain ash; while watching it the snake promptly apprehended and swallowed a small wood-adder about 5 inches in length.

30/4/22.—Walked on a five-foot Black Whip-Snake. It struck at me, but missed, as I was “well on the move.”

BIRDS AND NOTES

Through Mr. McLennan's perseverance, important bird-observation was carried on, particularly in regard to the little-known *Turnix olivii* (Buff-breasted Quail) and *Psephotus chrysopterygius* (Golden-winged Parrot).

Here follows list of birds observed with extracts from the collector's notes. The names of the species are according to proposed 2nd Edition Official Check-list, R.A.O.U. Sub-specific names in brackets and asterisk indicates skin collected:—

Dromaius novæ-hollandiæ. Emu.—On a river flat near Coen an Emu was noted with six small young. Took some “snaps” of “Dick,” a pet bird.

Casuarius casuarius (*C. c. australis*). Cassowary.—Heard a mysterious noise one night like the grunting of a horse in trouble. Think it was a Cassowary.

Alectura lathamii (*A. l. purpureicollis*) Purple-wattled Brush-Turkey.—Tommy brought back a fine Turkey, which will form the leading item on the menu tonight (21/2/22).

**Synoicus australis* (*S. a. cervinus*). Northern Brown Quail.—Flushed from some long grass a covey of Quail at Joe's Lagoon. The call of this bird is a double note whistle; first note short, second much longer; sometimes loud and sharp, but more often rather plaintive. Found an old nest with six shells, and later a nest containing five fresh eggs in a tussock of coarse grass, the blades of which were bent over and lightly woven, and formed the top and side of the nest. Nest merely a shallow depression 4 inches in diameter by 1 inch deep, and lined with a few eucalypt leaves and grass.

**Turnix olivii*. Buff-breasted Quail.—21/11/21.—Heard a deep booming call: “Ooom, ooom, ooom,” repeated rapidly for twenty rounds. The first few notes were very low, and appeared to come from a great distance, the succeeding notes gradually higher in tone, louder, shorter, and were more rapidly uttered, until the last notes were about five tones higher than the first. The call takes about 30 seconds of time. As I imitate the call, the bird answers, and in a few minutes I see a bird coming through the grass about 25 yards away. It is a female Turnix.

24/11/21.—Flushed a bird which landed 100 yards away and started to call; kept on calling, and appeared to be coming back toward me, which it eventually did.

6/2/22.—Saw a female Turnix running through a patch of grass closely followed by a male; one of them was rapidly uttering a soft whistling, chirruping note. Several times a different call was uttered—a deep humming “gug-gug-gug,” repeated rapidly for three to five seconds.

9/3/22.—Return to my marked tree, proceed carefully to within 10 yards and imitate the call. In a short time a bird replied from



Nest and Eggs of Northern Brown Quail (*Synoicus australis cervinus*).

Photo. by W. McLennan, R.A.O.U.

near-by; the chirping and gugging call of the male was heard once. Climb 40 feet to the fork of a big messmate, keep imitating the call at intervals, till finally the bird again replies. I see the female walking about in the grass beneath me. Get down and search all around: no luck. The male has another call, "Chirp-chirp-chirp-kwaare-kwaare." The first notes were short and rapidly uttered; the last two were of longer duration, much louder and with a distinct pause between.

12/3/22.—While walking through a patch of short grass, a Turnix flushed from close alongside my right foot. On looking down I saw a dome of dry grass amongst the green, which I thought was a rat's nest. A close examination proved it to be the long-sought nest of *Turnix olivii*, containing four fine eggs. Nest cvoid, entrance in large end, composed of fine, wiry, dry grass-stalks, a few straggling ends of which stick cut over the entrance for 7 inches; lined with short bits of fine grass, and a couple of eucalypt leaves (messmate); placed in a shallow depression in ground amongst fine short grass not interwoven with it; top, sides and back of nest very neat, no straggling ends. Dimensions, outwardly from entrance to rear $6\frac{1}{2}$ inches, depth $5\frac{1}{2}$ inches, width 5 inches; entrance, 4 inches diameter. Inside, from entrance to rear, $5\frac{1}{2}$ inches; depth, $4\frac{1}{2}$ inches; width, 4 inches.

13/3/22.—Heard a male calling differently from any previous call, a deep-toned whistling, "Chu-chu-chu," rapidly uttered. Every time I imitated the call of the female he replied with this call.

17/3/22.—Tommy heard a Turnix calling in a grass pocket. Search well, and find a nest with a broken eggshell in it; two more broken eggs near by, showing teeth marks of some reptile, which Tommy says was a goanna.

22/3/22.—Flushed a bird again, which I feel sure has a nest close by; search thoroughly, and found it about 150 yards from where I first heard the bird calling; take two photos; camouflage the camera with grass and bushes in the hope of snapping the bird. After an hour go to the camera, and the bird flushed from a couple of feet to the side of the nest, being too scared to go into the nest. Nest was placed in a shallow depression between a stool of long grass and a small shrub. Eggs heavily incubated.

24/3/22.—After breakfast Tommy brings horses, and as it will be some considerable time before I finish my job, I send him along to look round place where we heard Turnix calling yesterday afternoon. About an hour and a half later I heard Tommy returning at a gallop, and wondered what was wrong until I caught sight of his face. There wasn't room for the extra smallest portion of a smile on his black face, and he was that excited he could hardly speak. At last he blurted out: "I findem nest, four hegg this time, quite fresh one." I eventually got a collected account from him. Take camera and extra film cartridge and go along with Tommy. The nest was situated in a thinly grassed patch—thin stools of long grass widely scattered with fine short grass growing between—at the base of a stool of long grass. It contained a lovely set of fresh eggs, one rather strikingly marked in comparison with the others.

27/3/22.—Tommy noticed a track through the grass, and on looking closer found the nest of Turnix containing four eggs some distance away from where we previously flushed the bird. Nest placed at the base of a stool of long grass among short fine grass, and under a small creeping plant, which almost completely hides the nest from view.

The diary contains other instances of nest-finding. Numbers of eggs are apparently destroyed by lizards (goannas).

[For further particulars of this species, see *Emu*, ante, pl. 1 (coloured) and descriptions of nest and eggs, with photo-blocks, pls. ii.-iv., and pp. 1-2.]

**Turnix maculosa* (*T. m. melanota*). Red-backed Quail.—Observed a bird, evidently breeding; suitable nesting country hereabouts.

Turnix castanota (?). Chestnut-backed Quail.—Flushed covey of five birds, but am not sure of the species.

Ptilinopus superbus. Purple-crowned Pigeon.—A bird was flushed from its frail nest 10 feet from the ground; the nest contained one fresh egg; another nest was seen 7 feet from the ground with one young bird in a eucalypt sapling; parent very quiet.

Megaloprepia magnifica (*M. m. assimilis*) Allied Purple-breasted Pigeon.—Heard calling in the scrubs.

Myristicivora bicolor. Nutmeg (Torres Strait) Pigeon.—A nest seen 20 feet from ground; climb up and take one egg with 7 ft. rod and scop; another nest 30 ft. up.

**Macropygia phasianella* (*M. p. robinsoni*). Northern Pheasant-Pigeon.—A nest found 12 feet from the ground in the top of a fan palm; one egg heavily incubated. The nest is a bulky structure of twigs and bunches of *Casuarina* leaves; it measures 6 inches diameter by 8 inches deep; odd twigs stick out a few inches beyond the bulk; there is a slight depression for the egg. The irides are exceptionally beautiful, there being "an outer circle of deep crimson and an inner circle of blue."

Chalcophaps chrysoclora. Green-winged Pigeon.—Heard calling.

Geopelia humeralis. Bar-shouldered Dove.—Frequently noted. A nest containing two small young was seen in a *Pandanus* palm. Another nest was on the leaves of a *Pandanus* 3 feet from the ground; two eggs; still another in a small bush 2 feet from the ground, a coarse structure of twigs lined with fine rootlets; it was 12 inches diameter by 3½ inches deep; egg depression 3 in., ½ inch deep.

Geopelia placida. Peaceful Dove.—Saw a bird building 12 feet from the ground in a swamp paperbark (*Melaleuca*).

**Geophaps scripta* (*G. s. peninsulari*). Northern Squatter-Pigeon.—An excellent bird for the pot; often flushed in burnt areas; found a nest containing two fresh eggs in a patch of short, dry grass on bank of creek; also found two young almost fully fledged in a patch of dry grass; they flew off in opposite directions, one landing on burnt country took a long time to find. Took a photo of them in the nest.

2/11/21.—Numbers of Squatters perched up in ironbarks. Young not long hatched; eyes not open, body covered with dirty white down.

[For description of bird, its nest and eggs (with photo.), see *Emu*, xxi., pp. 163, 167, and pl. 39.]

Rallina tricolor. Red-necked Rail.—Heard calling after dark.

**Amaurornis moluccanus*. Brown Rail.—15/1/22.—Heard calling as they flew over southward at night. The call is a sharp, short, grating "Tchek," uttered at intervals of about a second. By a creek a bird was flushed from its nest in long grass and bushes; four eggs. Stalks and blades of grass were bent over and matted to form base and sides of nest, which was well lined with blades of dry grass. Measurements, 8 in. diameter by 4 in. deep; egg chamber, 4 in. by 2½ in. 8/1/22.—A native brought in a fine set of five eggs. Later, I found a nest with six eggs, 2 feet from ground. The bird had completely screened the nest by breaking and bending the grass blades above and around. 26/2/22.—Black Moor-hens heard calling near camp; they seem fairly plentiful. Catch a glimpse of one occasionally close by.



Nest and Eggs of Brown Rail (*Amaurornis moluccanus*).

Photo. by W. McLennan, R.A.O.U.

Porphyrio melanotus. Swamp Hen.—Numerous on a great rush-grown swamp; try to explore place; too boggy.

Lobibyx miles. Masked Plover.—Noted several times.

**Charadrius dominicus*. American Golden Plover.—Seen on town flat.

Charadrius ruficapillus. Red-capped Dotterel.—Noted with Greenshanks on a saltpan.

Numenius phaeopus. Whimbrel.—23/10/21.—Noted on town flat.

**Mercoscolopax minutus*. Little Whimbrel.—7/10/21.—Shot a bird from a flock of about a dozen on Ccen grass flats. Strange to see these birds inland; no big swamps anywhere near.

Glottis nebularius. Greenshank.—Noted.

Piscibia subminuta. Long-toed Stint.—A single specimen seen.

**Gallinago hardwicki* (*G. h. australis*). Australian Snipe.—Flushed in marshy country. Very fat, end of March, and ready for their long flight.

Burhinus magnirostris. Scuthern Ston-Plover.—Was presented with a set of eggs. A bird was seen running, but disappeared from view; it was found stretched cut on the ground among the rocks; it was a young one, nearly full grown.

Eupodetis australis. Australian Bustard (Plain Turkey).—One shot for the pot, or rather, was "cooked in the ashes."

Antigone rubicunda. Brolga (Australian Crane).—One Crane together with a Jabiru, pair of White Ibis, four Pied and one Plumed Egrets and a flock of Masked Plovers noted at a small fresh-water swamp.

Xenorhynchus asiaticus. Jabiru.—2/5/22.—Five seen in company of White-necked and Blue Herons, Egrets, Greenshanks and Red-capped Dotterels at a large saltpan. An interesting company.

Threskiernis spinicollis. Straw-necked Ibis.

Egretta garzetta (*E. g. immaculata*) Little Egret.

Egretta intermedia. Plumed Egret.

Notophoxyx novæ-hollandiæ. Blue Heron.

Notophoxyx aurens.† Pied Egret.

Notophoxyx pacifica. White-necked Heron.—Six foregoing species noted.

Dupetor flavicollis (*D. f. gouldi*). Black Bittern.—Building in a small paperbark (*Melaleuca*) by the bank of the river.

Dendrocygna javanica. Whistling Duck.—Noted; also pair of Green Pigmy-Geese (*Nettapus pulchellus*).

Astur novæ-hollandiæ. Grey Goshawk.—Grey phase noted.

Astur fasciatus. Australian Goshawk.—Nest in a tall paperbark, got the rope ladder into position by climbing an adjacent tree to throw the line over a suitable limb. Bird flushed on reaching the nest; three eggs.

**Accipiter cirrhocephalus*. Collared Sparrow-Hawk.—A nest was seen in a tall, thin paperbark about 60 feet up, but impossible to reach it. Another nest in a difficult position I reached with a long rod and scop, the limbs swaying about 8 feet in a strong wind; three eggs. Saw a bird carrying a small goanna in its talons.

Erythrotriorchis radiatus. Red Goshawk.—A fine bird sat in a tree and let me get very close to examine it.

Uroaetus audax. Wedge-tailed Eagle.—Nearing a nest I could see one of the birds sitting on the edge of it, the other bird was just a speck in the blue overhead. Climb up; no eggs; nest lined with fresh branches and leaves of eucalypts, most of which only just picked.

Haliastur leucogaster. White-breasted Sea-Eagle.—Noted.

Haliastur spheurnus. Whistling Eagle.—Several times noted. One bird was being savagely attacked by a Little Falcon.

Milvus migrans (*M. m. affinis*) Allied Kite.—8/11/21.—Single specimen seen flying along river.

Gypcoctinia melanosterna. Black-breasted Buzzard.—Noted.

Falco longipennis. Little Falcon.—A pair of birds were seen at a nest in a mountain ash (Eucalypt), when a Brown Hawk flew screeching into the tree and took possession of the nest. The Falcons tried to drive it away, but failed. I think the Hawk was the rightful owner.

Ieracidea berigora. Brown Hawk.—A nest, 50 feet from the ground, in a bloodwood, contained one fully fledged young.

Elanus axillaris. Australian Black-shouldered Kite.—Noted.

**Ninox boobook* (*N. b. macgillivrayi*). Cape Boobook Owl.—Rapping the trees I flush a bird from a hollow 25 feet from the ground; climb and find two eggs. Flushed another bird from its roosting hollow; it was chivvied unmercifully by a crowd of Friar-Birds, Honey-eaters, and Butcher-Birds until the Owl went into another hollow to escape the maddening crowd.

Ninox (? sp.).—Saw a bird flying about after dusk and sometimes heard the call at night.

**Trichoglossus moluccanus* (*T. m. septentrionalis*). Northern Rainbow-Lorikeet.—A pair flushed from a hollow in a cabbage gum, could not get at the nest. Two other nesting hollows were seen; secure two eggs.

Psittuteles versicolor. Varied Lorikeet.—Numerous with other species of birds in the flowering gums.

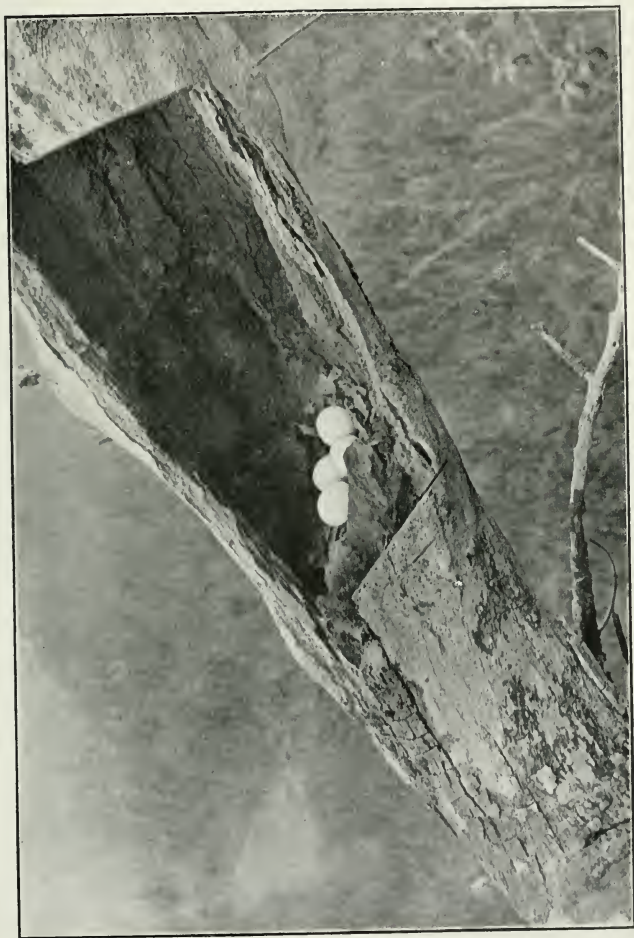
29/1/22.—These birds are now all paired off; see eight pairs inspecting hollow spouts. One lot had enlarged the hollow by biting out the rotten wood.

2/4/22.—Find a nesting hollow 20 feet from the ground. The bird would not come out so I enlarged the hole and put in my hand. The bird bit a piece out of the ball of my thumb. Four eggs lying on a bed of finely chipped rotten wood and dead gum leaves with a few feathers. The dead leaves might have been part of an old nest of a small Phalanger (Marsupial).

16/4/22.—Nest with four eggs in horizontal spout at depth of 12 inches. Three double handfuls of chipped, rotten wood resting on lip of spout, which had been scratched out by the birds. Another nest I could not get at, so made fast a rope; saw off spout, and lower to ground. Entrance, 2½ in.; depth of hole, 2 ft. 9 in. Eggs, four, resting on rotten wood with a few feathers of the bird, a green gum leaf and a couple of cases of bag-moth. At another nest the male was flushed, but the female climbed into a cavity above the entrance hole and would not come out; three eggs.

On two occasions eggs were observed in nesting sites previously occupied by the Black Tree-Creeper (*C. melanota*).

In one nesting hollow of a Lorikeet the eggs were resting on a bed of green eucalypt leaves nipped into small pieces, which the birds



Nest and Eggs of Varied Lorikeet (*Psittodites versicolor*).

Photo. by W. McLennan, R.A.O.U.



Nest and Young of Red-winged Parrot (*Aprosmictus erythropterus*).

Photo. by W. McLennan, R.A.O.U.



Nest and Eggs of Northern Pale-headed Rosella (*Platyercus adscitus amathusia*).

Photo. by W. McLennan, R.A.O.U.

had evidently brought. There was no decayed wood-dust in the bottom of the hollow.

[Dimensions in inches of clutch of four eggs:—(A) .87 x .73, (B) .87 x .72, (C) .88 x .74, (D) .88 x .73.—H.L.W.]

Probosciger aterrimus. Palm Cockatoo.—Noted.

Cacatua galerita (*C. g. queenslandica*). Little White Cockatoo.—Often noted nesting.

Cacatua roseicapilla. Galah.—Often noted. A nesting hollow 40 feet from the ground contained four eggs resting on a bed of green gum leaves. The only place up north where this bird occurs on the eastern watershed.

**Lorius pectoralis*. (*L. p. macgillivrayi*)†. Red-sided Parrot.—Heard calling in the same scrub with Geoffroyus, but they often cease calling as soon as I enter the scrub. Eventually locate a flock of about eight birds. Being the rainy season, most of them are in a very ragged state of plumage; big gaps in the wing feathers and only one or two feathers in the tail. They fly off with discordant alarm calls, "Krrraark-krrraark."

**Geoffroyus geoffroyi*. Red-cheeked Parrot.—A single specimen first noticed winging its way across a gorge on the Macilwraith Range. In the scrub a bird flew away screeching, but came back. These birds have a habit of daily visiting and feeding in the same tree. Tommy made a squeaker out of a small bamboo, with which he could imitate the call; the birds replied.

Aprosmictus erythropterus. Red-winged Parrot.—Flushed a bird from a hollow 35 feet up. Tree appeared to be hollow to the ground, so cut a hole at 3 feet and find a fully fledged young one.

**Platycercus adscitus* (*P. a. amathusiæ*). Northern Pale-headed Rosella.—Nesting hollow found 25 feet from ground in mountain ash; five eggs. Another nest also had five eggs, resting on a bed of chipped, rotten wood.

**Psephotus chrysoptergius*. Golden-winged Parrot.—23/4/22.—A bushman first told me of the "Anthill Parrot," and said he knew of a nest. Go out with him eastward into lightly timbered country in places a bit boggy, and come to a flat, thickly dotted with magnetic and tall, thin, spire-shaped termitariums (White-ant mounds). Locate the nest in one of the anthills, and the bird flushes while I am within a few yards. Can feel eggs with a light twig. Take several photos, then secure the eggs, which prove to be heavily incubated. Termitarium 18 in. diameter at base, 6 ft. in height; entrance to nest, 2 ft. 6 in. from ground, and 1½ in. diameter; tunnel, 3¼ in. long, then enlarged chamber 7 in. by 6 in. deep, bottom being 2½ in. below level of entrance. Hearing strange Parrot calls, a pair of birds presently appeared, the male flying to the top of the anthill and the female to the entrance of the nest. I really expected to see *P. pulcherrimus* the Paradise Parrot, but they proved to be the very rare Golden-winged Parrot.

Several old nests were noted in similar situations; then we found one where the birds were preparing, as the mound of dirt at base of anthill was quite fresh. By fastening a lighted match to the end of a twig the interior was illuminated. No eggs yet.

1/5/22.—Found a nest in which I could hear young squeaking. Another had five eggs, and one young bird just hatched. Take photo

† According to Rothschild, the name of the dominant species should be *Lorius roratus*, Mull., *vide* Ann. & Mag. ix., p. 411.

and patch up the hole again. Four miles further on found that a Black-tailed Finch (*Poephila atropygialis*) had built in a chamber hollowed out by a Golden-winged Parrot; on looking in found the Parrot had laid four eggs in the Finch's nest; found still another Psephotus Parrot's nest, which contained four fresh eggs. Numerous old nesting holes were noticed, all in termitariums.

Later in the month several nests were examined, which contained young in various stages of development. In the floor of the nesting chamber in every instance there was a remarkable colony of scavenger grubs, the larvae of some moth, the species of which has not yet been determined.

[See further this issue, description of eggs, etc., p. 98].

Podargus papuensis. Papuan Frogmouth.—Found a nest in a big paperbark with the bird sitting; on attempting to climb, the bird flushed, knocking its egg off the flimsy nest to be broken on the ground beneath.

**Podargus strigoides* (*P. s. capensis*). Cape Frogmouth.—After dark this bird is heard uttering a call of two syllables of even tone, "Koo-hook" ("oo" as in fool), the second slightly louder than the first, repeated up to eighteen times in ten seconds. The first few notes of the call are very faint, appearing to come from some considerable distance away, gradually getting louder and clearer; toward the end there is quite a ventriloquial effect. Once the bird uttered a different call, a single "Gug" repeated rapidly for a few seconds. Saw a fresh nest. [For photo. of nest in situ, see *Emu* xxi., pl. 39.]

**Egotheles cristata* (*A. c. leucogaster*). Owlet Nightjar.—Found a set of four white eggs in a hollow. On looking into the hollow from horseback the bird flew out, brushing my face.

**Eurystomus orientalis*. (*E. o. pacificus*) Broad-billed Roller.—Flushed from a hollow 20 ft. up in a mountain ash; three fresh eggs.

Alcyon azurea (*A. a. pulchra*). Purple Kingfisher.—Seen along the river.

Syma torotoro (*S. t. flavirostris*). Yellow-billed Kingfisher.—Noted.

**Dacelo leachi*. Blue-winged Kookaburra.—Found a nest in the hollow trunk of a gnarled old bloodwood (Eucalypt) containing a remarkable set of five eggs; subsequently took another set of four from same site. Another nesting hole contained one egg, together with one egg of Northern Rainbow Lorikeet. A few days afterwards there were two eggs of each species. Climbed to a hollow, and found three small young; one trying to swallow a young goanna about 9 in. long; about 6 in. of the reptile hanging out of the youngster's mouth. Send Jack back for special lens. By the time he returns 1½ in. more of the goanna has disappeared. The young are quite naked and eyes not yet open.

**Dacelo gigas* (*D. g. minor*). Little Kookaburra.—Saw two nests, both in termites' nests 20 feet up in trees; one contained four eggs.

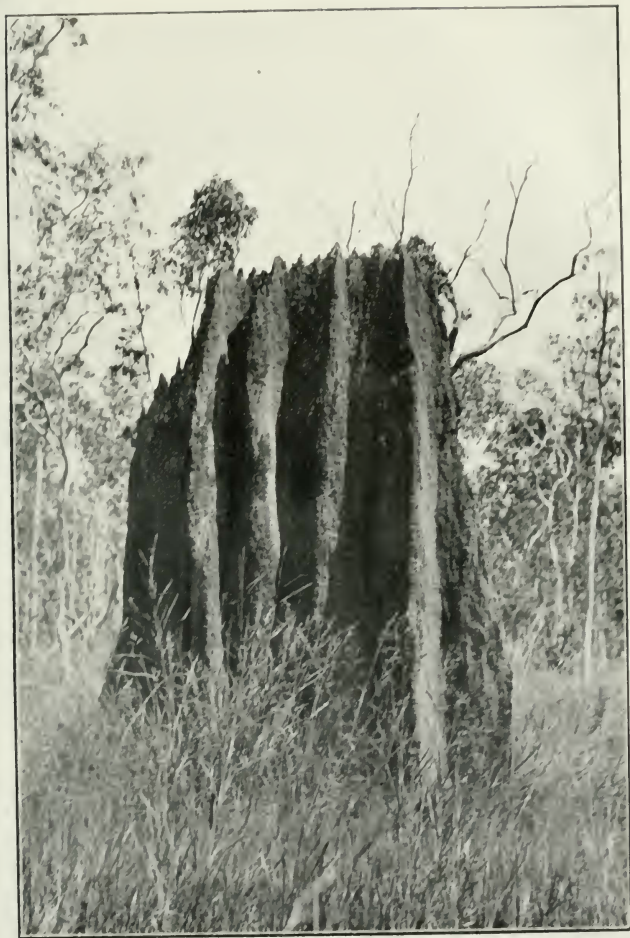
**Halcyon macleayi* (*H. m. barnardi*). Northern Forest Kingfisher.—Found a bird drilling a hole in a termites' nest 20 feet from the ground. Later on I took five eggs, which were very dirty, the result of the termites trying to build over them.

**Halcyon pyrrhopygius*. Red-backed Kingfisher.—Secured one specimen.

Halcyon sanctus. Sacred Kingfisher.—Noted several times.

Tanysiptera sylvia. White-tailed Kingfisher.—Noted in the scrubs.

Merops ornatus. Rainbow-Bird.—Saw Tommy digging out a hole, and asked if he had got a goanna. "No more goanna," said he.



Nesting site of Golden-Shouldered Parrot (*Psephotus chrysopterygius*) in Meridian Anthill.

Photo. by W. McLennan, R.A.O.U.



Nest and Eggs of Blue-winged Kookaburra (*Dacelo leachi*).

Photo by W. McLennan, R.A.O.U.

"Nest belong pretty feller bird." The nest had five white eggs. 22/2/22.—Flock of Bee-eaters seen flying northwards.

Cellocalia franca. Grey Swiftlet.—Noted hawking overhead.

Micropus pacificus. White-rumped Swift.—Noted in company with previous species.

Cuculus pallidus, Pallid Cuckoo; *Cacomantis flabelliformis* (*C. f. athertoni*), Northern Fan-tailed Cuckoo; *Cacomantis castaneiventris*, Chestnut-breasted Cuckoo.—Noted.

Cacomantis pyrrhophanus. Square-tailed Cuckoo.—Egg taken in nest of the Brown-backed Honey-eater (*Glyciphila modesta*).

Lamprocoecyx (sp.). Bronze Cuckoo.—Noted.

Eudynamys orientalis (*E. o. cyanocephalus*). Koel.—Often seen and heard. A crowd of large Honey-eaters frequently give a female Koel a bad time, fly at it, bear it to the ground, pecking and buffeting it severely. Once a pair of *Grallinas* (Magpie-Larks) joined in a chase, and, landing on the ground, pecked and buffeted the Koel severely. The Koel makes feeble resistance, and tries to escape to the bushes.

Seeing a crowd of Friar-Birds darting at something on the ground, I rode up and found a female Koel, which made off, followed by its tormentors, their numbers being augmented on the way. I could hear the scolding cries for some time after they were lost to view. I have never seen a male Koel being chased by other birds nor heard an alarm sounded when one breaks cover.

Found a nest of *Philemon citreogularis sordidus* (Little Friar-Bird) containing an egg of the Koel, and on the ground beneath was a broken egg of the Friar-Bird.

Scythrops novæ-hollandiæ. Channel-bill Cuckoo.—Often heard calling after daybreak, but no eggs found, though I frequently examined the nest of Bell Magpies (*Strepera*) in the hope of obtaining a Channel-bill's egg.

Centropus phasianinus. Pheasant-Coucal.—Tommy found a nest with eggs heavily incubated.

Pitta versicolor (*P. v. simillima*). Lesser Pitta.—Heard calling in the scrubs.

Pitta mackloti. Rainbow Pitta.—Its mournful call could be heard in the scrubs. A nest containing three eggs was found in some low scrub grass.

Microeca fascinans (*M. f. pallida*). Pale Flycatcher.—Noted.

**Microeca flavigaster*. Lemon-breasted Flycatcher.—Found a nest which made a good subject for a photo. Another nest contained one small young, which one of the parents was covering, to protect it from the sun.

**Smicrornis flavescens*. Yellow Tree-Tit.—Found a nest 15 feet from the ground in drooping branches; the bird sat till I put my hand on it; two eggs.

**Gerygone albogularis*. White-throated Warbler.—Common and nesting. The male does not appear to take any part in building, though he generally inspects the work of the female, and constantly trills his sweet little song in and about the nesting tree.

**Gerygone magnirostris*. Large-billed Warbler.—Found nesting. One pair was building in a paperbark 4 feet over water.

Gerygone palpebrosa (*G. p. personata*). Masked Warbler.—Nesting.

Poeciledryas superciliosa. White-browed Shrike-Robin.—Seen several times, notably on the creeks.

Pachycephala rufiventris (*P. r. pallida*).—Pale-breasted Whistler.—Noted several times.

**Rhipidura leucophrys*. Black-and-White Fantail.—A homely bird; nesting.

Rhipidura flabellifera (*R. f. phasiana*), Pheasant Fantail; *Rhipidura rufifrons* (*R. r. kempia*), Cape Rufous Fantail; *Rhipidura setosa*, Northern Fantail.—All noted.

**Myiagra rubecula* (*M. r. concinna*). Blue Flycatcher.—A nest was seen on a dry limb 20 feet from the ground.

Myiagra ruficollis (*M. r. latirostris*), Broad-billed Flycatcher; *Piezorhynchus alecto* (*P. a. nitidus*), Shining Flycatcher.—Both noted.

Monarcha trivirgata (*M. t. albiventris*), White-bellied Flycatcher.—Heard calling and often seen in the scrubs.

**Graucalus novæ-hollandiæ*. Cuckoo-Shrike.—Several nests seen, and two eggs taken.

**Graucalus hypoleucus*. White-breasted Cuckoo-Shrike.—Nest seen on a horizontal fork 25 feet from the ground; two eggs. The bird kept flying at me snapping its bill while I was at the nest.

Edoliisma tenuirostris. Great Caterpillar-eater.—Both male and female seen; a shy species. 21/11/21.—A bird flushed uttering a short, sharp whistle; "tcheep," at about two-second intervals. Have not heard that call before.

Campephaga tricolor. Caterpillar-eater.—A nest found in a cabbage gum.

Drymodes superciliaris. Northern Scrub-Robin.—Noted. Fond of land-shells. Broken Helix shells seen scattered through the scrubs.

Pomastomus temporalis. Grey-crowned Babbler.—Noticed a bird gather a large billful of messmate bark strips. Found a nest in the dead branches of a fallen tree; observed three eggs in another nest.

Cisticola exilis. Fantail-Warbler.—Seen.

**Sericornis magnirostris* (*S. m. viridior*). Large-billed Scrub-Wren.—Noted. Appear like a new variety.

Malurus amabilis. Lovely Wren.—Noted.

**Malurus melanocephalus* (*M. m. dorsalis*). Red-backed Wren.—Nests seen with three and four eggs respectively. A nest was found attached to a small shrub among swamp grass, composed of fine strips of various soft barks and fine grass, lightly bound with cobweb and lined with fine grass. Measurements, 5 in. by 2½ in. over-all; entrance, 1½ in.

**Artamus hypoleucus*. Grey-breasted Wood-Swallow.—Several pairs were seen nesting. One nest containing four eggs was placed in an old nest of the Babbler.

Artamus minor. Little Wood-Swallow.—Once noted.

Colluricincla megarrhyncha (*C. m. gouldi*). Allied Rufous Shrike-Thrush.—Noted in the scrubs.

**Colluricincla brunnea*. Brown Shrike-Thrush.—One nest found in a Pandanus; another in the hollow top of a dead stump; eggs three.

Grallina cyanoleuca. Magpie-Lark.—Frequents forest country.

**Neositta striata*. Striated Tree-runner.—Several times seen in small parties in the forest.

**Climacteris melanota*. Black Tree-Creeper.—This was one of the particular searches of the trip, and much time was spent in observation of nesting habits. Eggs were observed during September, October and November. First nest found by watching the bird, which in a few minutes flew to a hollow 24 feet from the ground. Result: Two lovely eggs, which I could just reach; nest composed of short

grass, cattle hair and pieces of bark; a few pieces of charcoal were with the eggs.

While watching another bird saw a shadow on the ground as its mate flew toward it from a hollow at my back. One bird came back carrying a piece of charcoal and entered the hollow; nest there right enough; two eggs.

Take up a position and watch another pair of birds. For half an hour they fly from tree to tree and on to the ground in an aimless manner. It is an eye-strain watching these protectively coloured birds; any movement of falling leaf or shadow of passing bird attracts attention, and as you flash a glance at it that is the moment for your quarry to disappear to another tree, silently and quickly, as if watching its opportunity. Eventually both birds flew to a hollow 15 feet up, and visited this hollow four times, once with something in their bills. I climb to this hollow, but can see no nest, but am not satisfied. After a while I see one of the birds carrying a large piece of grass. It flew to a tree, and clung motionless, merging into the dark spots and shadows on the bark. Slowly it hopped up to the topmost branches, and then, fluttering like a wind-blown leaf, it planed to the base of another tree, and repeated the performance. It sat still for what seemed an interminable period, and then flew straight to a hollow in a dry tree, where it was joined by its mate. The bird came out minus the bill-load and flew out of sight. Examine the hollow and find nest with one egg.

Cut out a hollow to note construction of the nest. Hollow filled for 7 inches with coarse tufts of grass, on top of this a layer of horse dung (some of the balls of which were unbroken), and dingo dung for 5 inches. On top of this the nest proper consisting of short fine grass, fine shredded bark, cattle hair, wallaby fur and snake scales, with quite a lot of small pieces of charcoal.

While observing another nest the bird came back carrying a piece of charcoal in its bill. Still another nest had a large handful of charcoal under it besides the usual base of coarse grass and dung. Termites sometimes start to eat the grass and dung. The greatest quantity of material noted in a hollow consisted of 10 inches of coarse grass and strips of paperbark up to 8 inches long, then 5 inches of dung packed on top. Snake scales are found in some nests, sometimes not. [For description of eggs, with photo. of nesting site see *Emu*, xxi., pp. 166, 310, and pl. 64.]

**Zosterops lateralis (Z. l. ramsayi)*. Yellow-vented White-eye.—A small party seen.

Pardalotus rubricatus (P. r. yorkei). Cape Red-browed Pardalote.—A nest found in bank of river at end of 9-inch tunnel; three eggs. These birds appear to me to differ from the same species in Western New South Wales; yet their calls, four or five short, clear, whistling notes, are exactly alike.

**Pardalotus melanocephalus (P. m. barroni)*. Northern Black-headed Pardalote.—I found a bird drilling its nesting burrow in the bank of a small creek.

**Myzomela pectoralis*. Banded Honey-eater.—This charming little Honey-eater was numerous, and several of their small nests were found hanging in paperbarks suspended by rim; eggs, usually two. The male will not allow any other birds near the tree where the mate is sitting, even attacking and driving off large Friar-Birds. One nest was two feet from the ground in a small sucker. Once a sitting bird allowed itself to be stroked by one's finger.

After rigging shearlegs to another nest 17 feet high, I sat on top with the camera and waited patiently. After a while the bird returned and snuggled down on the eggs. I had to touch her with my finger to make her move off so that I could get a picture of her returning. Nest, a frail cup-shaped structure composed of fine strips of bark and grass lightly bound with web and cocoon-silk, and lined with very fine seed-tops of dry grass; measurements, 2 in. by 2 in.; inside, $1\frac{1}{2}$ in. by $1\frac{3}{4}$ in. deep.

Myzomela obscura. Dusky Honey-eater.—Noted.

Conocephala albogularis. Rufous-breasted Honey-eater.—Numerous.

Meliphaga analoga. Yellow-spotted Honey-eater.—Heard calling in the scrubs.

**Meliphaga versicolor*. Mangrove Honey-eater.—Noted.

Glychichaera claudi. Green Honey-eater.—This little and rare bird was noted.

Meliphaga gracilis. Lesser Yellow-spotted Honey-eater.—Noted.

**Meliphaga flava*. Yellow Honey-eater.—I saw a bird building in a mango tree and another in a paperbark.

Xanthotis flaviventris (*M. f. filigera*) Streak-naped Honey-eater.—Noted in the scrubs.

**Trichodere cockerelli*. White-streaked Honey-eater.—Tommy found a nest containing two eggs situated 2 ft. 6 in. from the ground in a seedling paperbark. Nest, a frail, deep, cup-shaped structure suspended by the rim; composed of very fine rootlets lightly bound with web; lined with very fine grass. Measurements: outside, $2\frac{3}{4}$ in. by 3 in. deep; inside, $1\frac{1}{2}$ in. by 2 in. deep.

Glyciphila fasciata. White-breasted Honey-eater.—Noted.

**Glyciphila modesta*. Brown-backed Honey-eater.—A nest was found suspended from small twigs, and composed of small pieces and strips of paperbark bound with web and cocoons, lined with soft pieces of paperbark. Measurements: overall, 7 in. by 3 in. diameter; entrance almost concealed by overhanging hood, $1\frac{1}{4}$ in. diameter; inside, $1\frac{3}{4}$ in. by 2 in. deep; eggs, two.

Stigmatops indistincta (*S. i. ocularis*). Least Honey-eater.—Noted.

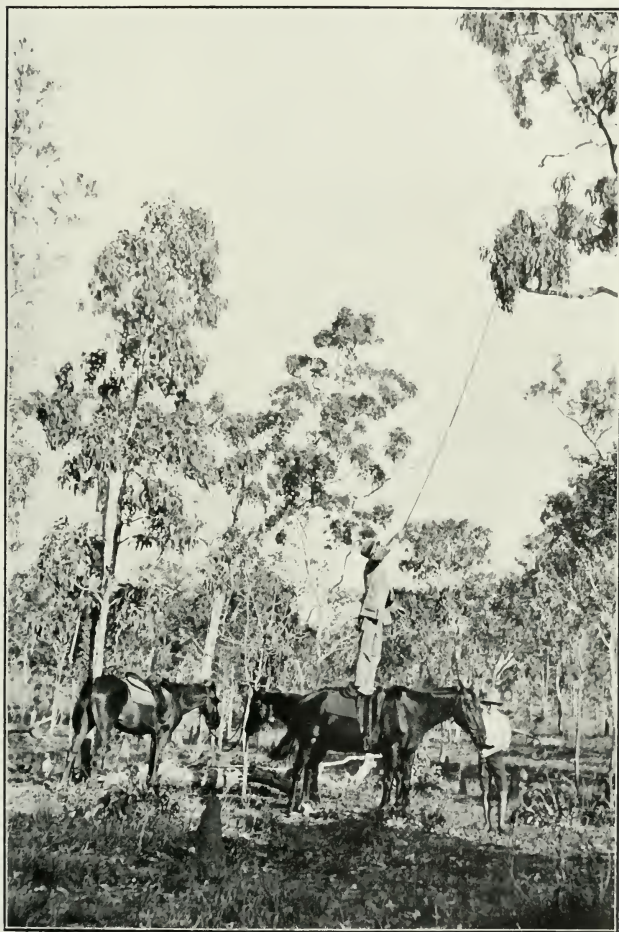
**Entomyzon cyanotis* (*E. c. harterti*). Northern Blue-faced Honey-eater.—Plentiful. Nests frequently noted in varying situations, in Pandanus palms, paperbarks; sometimes in old Babbler's nests, and once in a strange situation, viz., on wallplate under the eaves of the court house. Flushing a bird from a Babbler's nest, I found two eggs of the Honey-eater and one of the Babbler, the former having taken possession without building a nest of its own inside, which it usually does. In another such domicile I noted seven eggs. The Honey-eater used strips of paperbark for lining, which were mixed in with the messmate bark used by the Babbler.

Passing a Pandanus, where I had noted a Blue-faced Honey-eater's nest with three young just hatched, two eggs chipping and one addled egg, the bird flushed from the same nest, which contained three fresh eggs.

25/10/21.—*E. cyanotis* flushed from Babbler's nest 30 feet from ground in ironbark. Nest contained four eggs of two distinct types.

8/5/22.—Nest of *E. cyanotis*, 25 feet from ground, in nest of Magpie-Lark; four young just hatched.

**Philemon argenticeps*. Silvery-crowned Friar-Bird.—Many nests noted; 2 to 3 eggs in each. One set was broken; eggs very pale salmon pink, with a few faint bluish spots about the larger end.



Taking Nest of Northern Blue-Faced Honey-Eater (*Entomyzon cyanotis harterti*).
Many species of eggs were secured by this method of rod and spoon.

Photo. by W. McLennan, R.A.O.U.



Playground of Queensland Bower-Bird (*Chlamydra nuchalis orientalis*).

Photo. by W. McLennan, R.A.O.U.

Philemon yorki. Helmeted Friar-Bird.—Noted.

**Philemon citreogularis* (*P. c. sordidus*). Sordid Friar-Bird.—Several nests found. A typical nest, composed of fine creeping plants and grass, bound with web and cocoon-silk, and lined with fine grass. Over all 5 in. by 3½ in. in depth; egg chamber 3 in. across by 3½ in. depth; eggs, two; sometimes seen from below through the nest. A nest in a bloodwood about 10 ft. from the ground contained an egg of the Koel Cuckoo. On the ground underneath was a broken egg of a Friar-Bird (7/1/22).

Steganopleura bichenovii. Banded Finch.—Found a nest 4 feet from the ground in a small bush.

Donacola pectoralis. White-breasted Finch.—A small flock noted in long grass.

Aegintha temporalis (*A. t. minor*). Lesser Red-browed Finch.—Noted.

**Pcephila atropygialis*. Black-tailed Finch.—Three nests found in Pandanus palms. Tommy found one and gave me a hail, saying, "Got four hegg, door round norther side." I pulled it from its resting place, and found it contained nine. Tommy remarked, "What's the matter that feller; he only small feller." After that he always called the Finch the "nine-hegg bird."

Pcephila personata. Masked Finch.—Several nests found in large stools of grass, three with six eggs in each. Nest outwardly composed of coarse wiry grass and lined with hair-like seed tops of swamp grass and a few feathers; a few pieces of charcoal were in with the eggs. Measurements: outside, 5 in. by 5 in., with spout 3 in. long; entrance, 1½ in. diameter; egg chamber, 3 in. across. Both birds waited near by while I examined the nest, each with a piece of charcoal in the bill; saw one nest built upon an old Bower-Bird's nest. One of these Finches collected feathers about the camp to line its nest.

Nest, a bulky mass of fine grass twigs and leaves of small plants, lined with hair-like seed, tops of grass; measurements, 8½ in. by 7 in. outside; entrance, 2½ in. by 1½ in.; egg chamber, 3½ in. by 2 in. deep. Later, when we got out into the anthill flats in search of Anthill Parrots, we often found this species of Finch with its nest built right out of sight in the old nesting chamber hollowed out by a Parrot. The termites did not appear to repair the damage done to the termitarium. On one occasion in a magnetic termitarium a Finch had taken possession of the Parrot's nest, and commenced to build. On removing the Finch's nest four Parrot's eggs were revealed. The Black-tailed Finch also builds its nest in a hollow spout of a tree.

Pecphila gouldiae. Gouldian Finch.—Several birds noted.

**Oriolus sagittatus* (*O. s. affinis*). Northern Oriole.—Found a nest in a nondah plum tree.

Oriolus flavocinctus. Yellow Oriole.—Noted.

Sphecotheres flaviventris. Yellow Fig-Bird.—Some seen near Coen. On another occasion saw a nest 40 feet from the ground.

Chibia bracteata. Spangled Drongo.—Found a nest containing two eggs situated 40 feet from the ground.

Ailuroedus melanotus (*A. m. maculosus*). Spotted Cat-Bird.—Noted in the scrubs.

**Chlamydera nuchalis* (*C. n. orientalis*). Queensland Bower-Bird.—Numerous. These birds feed largely on the seeds of the river wattle; bowers were noted; found a nest on a long horizontal limb of ironwood; could see the single egg through the structure. Secured the egg with a rod and scoop. Another nest contained one young one.

not long hatched, eyes open, head and body covered with long mouse-grey down. Saw another nest placed in a clump of mistletoe, and two in Pandanus palms—situations I would not have thought of looking in. These all had single eggs. I found a bird trying to build in the slippery three-pronged fork of Pandanus; a few twigs were in position, but enough material to make two nests had fallen to the ground. In another instance, a nest was prettily situated in a Coral tree. During November several two-egg sets were observed, notably in box sapling, Pandanus, ironbark, paperbark, and quinine trees. In the Pandanus tree there were no less than three old nests apparently of the same bird and two old nests in another tree 50 yards away.

Ptiloris magnifica. Magnificent Rifle-Bird; *Phonygammus keraudrenii*, Manucode.—Both noted in the scrubs.

**Corvus ceciliae*. Australian Crow.—Saw a nest in a tall mountain ash; birds frequently investigated the camp for what they could thief. Blackboy, when watering the horses, saw a Crow chasing a small animal about a tree, and rescued it; proved to be a young ring-tailed opossum. These birds go out to feed in the mangroves.

**Strepera graculina*. Pied Bell-Magpie.—Numerous. Noticed a bird chase a Friar-Bird away from a big wattle (*Acacia*), which contained a large nest. Though it stayed in the vicinity, it did not visit the nest. This is the first easy nest of this bird I have seen; most of them are at the top of tall paperbarks 60 feet or more from the ground. They usually provide a good exercise climb. I observed sets of two, three and four eggs.

[Description of nest taken at Coen.—Large open structure, composed of dead sticks and twigs of the Tea-tree (*Melaleuca*), lined with long thin plant stems and rootlets. Dimensions in inches:—Across overall, 14; depth overall, 5; egg cavity across, $6\frac{1}{2}$; egg cavity deep, 2.—H.L.W.]

Cracticus quoyi. Black Butcher-Bird.—Noted in the scrubs.

**Cracticus nigrogularis* (*C. n. picatus*). Pied Butcher-Bird.—Several nests found with three and four eggs. At one the birds savagely attacked me, repeatedly striking me on the head. [For photo. of nest and bird, see Emu, xxi., pl. 40.]

**Cracticus mentalis*. Black-backed Butcher-Bird. — Numerous. Watched a bird breaking twigs off a paperbark for building; it tried about fifteen before it got one to its liking, which it carried to the nest. A pair near the camp made very slow progress with their nest. I picked up 34 twigs, which had dropped in course of construction to the ground beneath. Found a nest in a cabbage gum containing four eggs. One of the birds attacked me. Another nest provided a good subject for the camera. The bird did not leave till I got within a couple of feet, but soon returned and settled on the eggs. Snap it. It then sat facing me on a twig a few inches over the nest. Secure another snap and the eggs, three. These birds feed largely on river wattle seeds as well as small birds. Saw a bird with a female *Malurus* in its bill.

**Gymnorhina tibicen* (*G. t. terra-regina*) Little Black-backed Magpie. —These birds are every bit as wild as those on Groote Eylandt. Have spent two hours following a party to try and get a specimen, but could not get within a hundred yards of them. Saw two nests about 40 feet from the ground, in one of which I observed three eggs.

[Description of nest taken at Coen.—The usual large open structure, composed of sticks, and neatly lined with grass, roots, and a few thin vines. This northern species does not use fur or hair in the lining of the nest. Dimensions in inches:—Across overall, 14; depth overall, $5\frac{1}{2}$; egg cavity across, $5\frac{1}{4}$; egg cavity deep, $3\frac{1}{2}$.—H.L.W.]



Nest and young (two) of Queensland Bower-Bird (*Chlamydera nuchalis orientalis*).

Photo. by W. McLennan, R.A.O.U.



Black-backed Butcher-Bird (*Cracticus mentalis*) at Nest.

Photo. by W. McLennan, R.A.O.U.